Workshop on “Harnessing NGS and AI: The Future of Genomics”

The **Department of Bioinformatics, Faculty of Computing** at the International Islamic University Islamabad organized a two-day workshop titled ***“Harnessing NGS and AI: The Future of Genomics”*** on **5th and 6th May, 2025**. This academic event was designed to equip students with practical knowledge in the rapidly evolving fields of Next-Generation Sequencing (NGS) and Artificial Intelligence (AI), particularly in their application of genomic data analysis. The 2 day session was led by **Dr. Waseem Haider**, PhD from the University of Illinois at Urbana-Champaign, and is Associate Professor in Bioinformatics at **COMSATS University Islamabad**. He holds expertise in Next Generation Sequencing (NGS) and RNA-Seq data analysis. His dedication extends beyond academia as he, along with his students, also lead a consultancy firm named Next Gen. Solutions (NGS) and one of his proud student and research scholar with expertise in data analysis, **Ms. Sadia Momal.** It had interactive and hands-on learning experiences, introducing students to essential data analysis tools using Python and R programming languages.

The workshop commenced with the welcome address delivered by **Dr. Attiya Kanwal (Incharge, Department of Bioinformatics)**. The event was organized under the supervision of the Focal Person of the Department of Bioinformatics, **Ms. Rimsha Yousaf**, whose efforts ensured the successful execution of the workshop. The workshop was joined by esteemed guest, **Prof. Dr. Asmat Ullah**, Dean of the Faculty of Computing and Information Technology at IIUI. His presence elevated the academic value of the event, with both guests sharing their insights on the integration of clinical research, AI, and bioinformatics.

The closing ceremony featured inspiring motivational speech by Prof. Dr. Asmat Ullah and **Ms. Tahira Noor**, the Incharge Bioinformatics female program. They emphasized the importance of adapting to technological advancements in biological sciences and encouraged students to continue exploring interdisciplinary approaches. As a token of appreciation, souvenirs were presented to the guest speakers, the Dean, the Head of Department, and the organizing focal person. Certificates were also distributed to all student participants in recognition of their active engagement and enthusiasm throughout the workshop.

This workshop served as a valuable learning platform, reinforcing the university’s commitment to academic excellence and innovation. It successfully bridged the gap between theoretical knowledge and real-world applications, empowering students with relevant skills and insights that align with global developments in genomics and data science.